

## GENERATION Y'S PERCEPTION OF PRODUCT ORIGIN AND ITS LABELLING IN THE CONTEXT OF FOOD QUALITY AND SAFETY

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### Abstract

The aim of the paper is to identify and compare how Generation Y consumers from the Czech Republic, Slovak Republic and Poland perceive the product origin and its labelling in the context of food quality and safety. First, the theoretical background of food quality and safety, product origin, and food origin labels is discussed. The next section is devoted to the methodology of research followed by a discussion of research results. Data were collected via the online survey with 530 respondents of Generation Y. Chi-square test, Kruskal-Wallis test and Mann-Whitney U test were used to determine whether consumer attitudes differ based on their country. A statistically significant difference between the attention given to food products origin in the purchase decision and the respondents' country was confirmed, the product origin is the most important for Poles. In comparison with Czechs and Slovaks, Poles have also a stronger preference for domestic food products, believing them to be of a higher quality than the foreign ones. In each respective country, the awareness of food origin labels is low and their benefits are not sufficiently perceived. Statistically significant relations exist between the attitudes of Czechs and Poles as well as Slovaks and Poles, whereas there are no differences between the attitudes of Czechs and Slovaks.

**Keywords:** food quality and safety, food products origin, Generation Y, consumer attitudes, European Union quality scheme, product origin labels

**JEL Classification:** D12, L15, M31, Q18

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## **Introduction**

In recent years, a strong interest in food products quality and safety, also manifested by an increasing demand for national, regional and local foods and by increased consumer interest in the food products origin, is observed worldwide. This trend can be considered a countertrend against the globalisation or may be the result of the food safety scandals that have shaken trust in food quality and safety across Europe over past years (Kjaernes, Harvey and Warde, 2007).

Offering food products with identifiable specific characteristics and providing more information and guarantees have become necessary in order to satisfy consumers and reduce their uncertainty. As a consequence, many European Union (EU) countries have begun to emphasize the origin of their products and have developed consumer protection strategies involving food origin labels utilization as a guarantee of food quality and safety.

However, different consumer segments react to food product origin and its labelling in different ways. Some are strongly interested in the food products origin and they attach positive utility only to domestic products. Another group of consumers prefer foreign products or products coming from certain countries. We can observe also consumers that ignore the product origin and are mostly interested in price or other product characteristics. In this context, interest in food product origin may differ across generations of consumers.

Each generation of consumers has unique needs, expectations, experiences, lifestyles and values that influence their buying behaviours. Within these generations, the largest demographic segment in most developed societies is Generation Y, also known as Millennials. Generation Y concerns the people born approximately between 1980 and 2000. Individual authors refer to different age boundaries of Generation Y, e.g. 1977-1994 (Sullivan and Heitmeyer, 2008), 1980-1994 (Bednall, et al., 2012), or 1982-2000 (Brosdahl and Carpenter, 2011). Members of this generation have a lifestyle different from previous generations. They are inevitably connected to the internet, mobile phones and social media and use them to search different product information and to make purchasing decisions. Word-of-mouth referrals are extremely important to them (DataMentors, 2016). Some studies have observed Generation Y's willingness to pay more for brands that represent quality (Quintal, et al., 2016). Generation Y accounts for 24% of the adult population in the EU member states and has significant purchasing power. It makes this generation attractive to the companies (Stokes, 2015).

Several studies deal with consumer perception of product quality and safety and consumer attitudes to product origin as a signal of product quality and safety. Some of them are elaborating the topic (or particular problem areas related to the topic) from the perspective of the promising segment of Generation Y, but they are focused mostly on particular product categories or countries. To the best of the author's knowledge, a study comparing Generation Y's attitudes in three closed EU countries, the Czech Republic, Slovak Republic and Poland, is missing. With respect to the gap in literature, the paper deals with attitudes of Czech, Slovak and Polish Millennials to product origin and its labelling in the context of food quality and safety. Its aim is to discover whether a food product origin is considered as an indicator of product quality and safety, to analyse preferred product origin and perception of domestic and foreign food quality, and to identify the attitudes to food origin labels included in the EU quality scheme. First, the theoretical background is discussed, followed by a research methodology and results discussion. Marketing implications, limitations of the research and suggestions for future research are presented at the end of paper.

## **1. Review of the scientific literature**

### **1.1 The operationalization of food quality and safety**

Food quality is a broader concept than food safety. Whereas food safety as the most important component of food quality means hazard-free product, food quality can be defined as a sum of traits and criteria which characterize food as regards its nutritional value, sensory value, convenience as well as safety for a consumer's health (Sikora and Strada, 2003). According to the results of the research study (Van Rijswijk and Frewer, 2008) conducted in four European countries (Germany, France, Italy and Spain), there is considerable overlap among responses when consumers were asked to define these terms. However, food quality is more frequently defined in terms of "taste", "good product" associated with a "proper production method", "natural/organic" and "freshness", whereas safety is primarily defined in terms of "absence of risk" or "harmfulness" and being associated with "health". For most consumers quality and safety are clearly related. Nowadays, consumers expect their food mainly to be safe, wholesome, tasty, and typical, i.e. linked to tradition and land (Lazzaroni, et al., 2013; Popescu, Negrea and Voinea, 2011). The perception of these characteristics can be influenced by the product origin and mediated through the labelling.

### **1.2 Product origin and labelling issues**

Product origin has an impact on consumer preferences, perception of food quality and safety and purchase decision-making. Consumers prefer to use product origin indicators in their food choice decisions because they feel they have no way of assessing the quality and safety level of a product, or because they have confidence that the safety of their food is guaranteed (Van Rijswijk and Frewer, 2008; Kalicharan, 2014). The effects of product origin on consumer purchase behaviour have been extensively studied. Several studies have shown that consumers tend to have a relative preference to products from their own country or may have a relative preference for or aversion against products that originate from certain countries (Oberecker, Riefler and Diamantopoulos, 2008). Country of origin effect is stronger in situations where consumers do not know much about the product or brand, where additional information is unavailable or difficult to get (Cai, Cude and Swagler, 2004).

Companies may indicate the product origin by means of a number of different strategies, including use of the phrase "Made in", use of product quality and/or product origin labels, embedding country of origin or some typical country of origin word in the product name, use of the country of origin language, flags, symbols or typical landscapes (Aichner, 2014).

An increasingly popular tool to emphasize the product origin and authenticity are quality (or product origin) labels placed on product packaging. These labels aim to provide consumers with clear information on the product origin or speciality character linked to the geographical area, enabling them to make more informed purchases (Verbeke, et al., 2012). They are intended to reduce consumer uncertainty, regarding expected product characteristics and the production process. They help to form expectations about the quality before the purchase (Saeed and Grunert, 2014). They enable producers to differentiate their products locally, nationally and internationally and ask for premium price for the product with some unique characteristics.

Due to the growing demands of customers and several food crises, quality labels have become increasingly popular (Savov, et al., 2017). Different food labelling schemes co-exist with the aim of informing customers and providing trust in different quality characteristics of food products. But consumers clearly valued labelling schemes that are regulated by EU law (Gracia and de-Magistris, 2016), involving Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), and Traditional Speciality Guaranteed (TSG) labels. The research of Fandos-Herrera (2016) highlights consumers' trust in the attributes of food products certified with PDO label that are a symbol of the link to the place of origin, tradition and natural values. The study of consumers' attitudes to the PDO, PGI and TSG labels in six European countries (Italy, Spain, France, Belgium, Norway and Poland) confirms that consumers' use of these labels is triggered by the belief that the labels signal better product quality (Verbeke, et al., 2012).

The number of products certified with such labels is growing yearly as is the number of companies seeking to use these labels to guarantee the quality they offer. However, many of them failed and the others are performing their function only to a certain extent. The problem lies in an expansion of these labels. Consumers often ignore them due to a lack of knowledge and the labels have been misunderstood by consumers (Grunert, 2002).

### **1.3 The Generation Y's specificity regarding quality, safety and origin of food products**

Recently published studies on this topic, linking consumer perception of food quality, product origin and awareness of related labels, reveal some specifics in the case of Generation Y. Millennials prefer the authenticity, uniqueness, quality and healthiness of products (Jennings, 2016). Naturalness and freshness are expected as basic attributes of food quality. According to the Nielsen study carried out in the 59 countries on a sample of millennial consumers, Millennials pay greater attention to healthy food than other generations. Almost half of them (47%) claim eating more healthy (compared with 35% of consumers aged 35-54 and 23% of consumers aged 55 and over). Especially those products, which contain pro-health substances, are perceived positively (Barska and Wojciech, 2014; Davis, 2015; Hartman, 2016). An importance of healthy food for this consumer group is emphasised also by Voinea, Atanase and Schileru (2016). Millennials consider also the value of the ethical and ecological origins of food (Livio, 2017), they favor more fresh foods and higher quality food with premium ingredients (Hartman, 2016). The study conducted by the International Food Council in 2014 reveals that this cohort is more loyal to a brand deemed to have quality products as opposed to a brand that has a better price (Davis, 2015).

Although the country of origin significantly influences product judgment (Zdravkovic, 2013), Millennials are less concerned with product origin than older consumers. Two thirds (68%) of them indicate that they want to know where the products were manufactured, compared to 80% of people aged 35 and older (Marzilli, 2017).

To obtain more complete information on the topic, some specific findings of the Special Eurobarometer survey from 2012 can be mentioned. The survey was carried out in the EU member states on a sample of 26 593 respondents aged 15 years and over. The study was not directly focused on Generation Y consumers, however the 15-24 and 25-39 age groups, substantially corresponding with age boundaries of Millennials, were included. As the results show, the vast majority of EU citizens say that quality is important (96%) to them

when buying food, 65% see it as very important. Food quality is less important to younger people, but the difference is small (60% of consumers in the 15-24 age group and 63% of consumers in the 25-39 age group see it as very important). Somewhat fewer respondents emphasise the origin of food, with over two-thirds (71%) seeing it as important but only one-third (34%) as very important. Young EU citizens are noticeably less likely to consider the origin of food products to be important, only 57% of consumers aged 15-24 consider it as important for them. Two-thirds (67%) of the EU citizens check food purchases to see if they have quality labels that ensure specific product characteristics, however only few (22%) do this consistently. Young people in the 15-24 age group are less likely to check for quality labels (58%) (European Commission, 2012).

The Special Eurobarometer survey from 2015 (27 822 respondents aged 15 years and over) has focused on consumer awareness (respondents were not asked to explain the logos meaning) of the EU food quality assurance scheme. The results reveal a low recognition of the PDO, PGI and TSG logos. Recognition of at least one logo is slightly higher amongst younger respondents aged 15-39. The PDO logo is the best known with 21% of recognition amongst Europeans aged 15-24 and 22% of recognition amongst Europeans aged 25-39 (compared with the EU average of 20%). Twenty percent of EU citizens aged 15-24 and 18 % of EU citizens aged 25-39 are aware of the PGI logo (compared with the EU average of 17%), TSG logo is recognized by 16% of Europeans aged 15-24 and 17 % of Europeans aged 25-39 (compared with the EU average of 15%) (European Commission, 2016).

## **2. Research methodology**

The main objective of the research was to identify and compare how Generation Y consumers from three very close EU countries, the Czech Republic (CR), the Slovak Republic (SR) and Poland (PL), perceive the food products origin and its labelling in the context of product quality and safety. With respect to this objective, the following research questions (RQ) were advanced:

RQ1: How many Czech, Slovak and Polish Millennials monitor the product origin when buying food?

RQ2: Are domestic products preferred and perceived as having a higher quality than the foreign ones?

RQ3: Are Czech, Slovak and Polish Millennials aware of product origin labels included in the EU quality assurance scheme?

RQ4: Do Czech, Slovak and Polish Millennials have different attitudes to product origin labels?

Due to some cultural and economic similarities between CR, SR and PL, similar attitudes of Czech, Slovak and Polish consumers are assumed. Therefore, following hypotheses were determined:

H0: The attitudes of Czech, Slovak and Polish Millennials to product origin labels are the same, i.e. there are no statistically significant differences between the attitudes to food origin labels based on the respondents' country.

H1: The attitudes of Czech, Slovak and Polish Millennials to product origin labels are different, i.e. there are statistically significant differences between the attitudes to food origin labels based on the respondents' country.

Data were collected in an online survey conducted in April 2016. Three structured questionnaires, differing only by language of the respective country, were developed. Generation Y individuals served as a population for the survey. The respondents were selected by judgemental sampling with respect to the role of women and men in household food purchases. According to the study of KPMG from 2016, women dominate household food shopping; food products for family are regularly purchased by 75% of women and only 25% of men (KPMG, 2016). A total of 530 respondents, involving 221 of Czechs, 158 of Slovaks and 151 of Poles completed the questionnaire. The final structure of respondents by gender and responsibility for food purchases is presented in table no. 1.




**Table no. 1: Structure of respondents (%)**

Gender	CR	SR	PL	Responsibility for food purchases	CR	SR	PL
Male	23.6	25.3	21.2	Full	46.2	60.1	58.3
Female	76.4	74.7	78.8	Partial	33.9	28.5	35.1
				Exceptional	19.9	11.4	6.6

In the first part of the questionnaire, a set of questions related to perception of country of product origin in the context of product quality and safety was elaborated (to answer RQ1, RQ2). The second part was focused on aided awareness of product origin labels (RQ3) and consumer attitudes to them (RQ4). Attitudes were measured on 7-point scales of agreement.

The number of food quality and origin labels is strongly high in each of the mentioned countries. In the questionnaire, the attention was drawn to the PDO, PGI and TSG labels included in the EU food quality assurance scheme for the registration and protection of regional and traditional products (table no. 2). These labels guarantee originality, quality, and traceability, as well as a higher level of food safety than other products. The scheme has existed since 1992 and for over twenty-five years, the European Commission has registered 1403 product items as PDO, PGI or TSG, of which 33 are registered by the CR, 19 by the SR and 37 by PL (to 29<sup>th</sup> August 2017) (European Commission, 2017a).

**Table no. 2: Summary of surveyed labels**

Labels description			Number of certified products		
			CR	SR	PL
	PDO	Products produced, processed and prepared in a specific geographical area, using the recognised know-how of local producers and ingredients from the region.	6	2	8
	PGI	Products whose quality or reputation is linked to the place or region where it is produced, processed or prepared, although the ingredients used need not necessarily come from that geographical area.	23	10	20
	TSG	Products of a traditional character, either in the composition or means of production, without a specific link to a particular geographical area. A proven usage of at least 30 years in a domestic market is needed.	4	7	9

*Source: European Commission, 2017b*

Data were analysed with the usage of IBM SPSS Statistics 23.0 and Microsoft Excel software. Descriptive statistics such as simple frequencies and mean values were computed. Chi-square test at 0.05 significance level was applied to test the dependences between nominal variables. For values measured on an ordinary scale, Kruskal-Wallis test and Mann-Whitney U, as an alternative non-parametric statistical technique (when the data are not normally distributed) to an ANOVA or t-test test were undertaken to compare whether population means are equal. Cramer's V coefficient (for nominal variables when the number of rows and columns or both is greater than two) and Eta coefficient (to determine the the degree of association between interval and nominal variables) were counted to prove the strength of relationship between variables. These descriptors were used to interpret the coefficients: 0.00 and under 0.10 - negligible association, 0.10 and under 0.20 - weak association, 0.20 and under 0.40 - moderate association, 0.40 and under 0.60 - relatively strong association, 0.60 and under 0.80 - strong association, 0.80 and under 1.00 - very strong association (Rea and Parker, 2014).

### **3. Results and discussion**

Results are structured into following four sections: (1) Product origin as indicator of food quality and safety and its role in purchase decision, (2) preference of product origin and perception of domestic and foreign food quality, (3) awareness of product origin labels included in the EU quality assurance scheme, and (4) attitudes to product origin labels.

#### **3.1 Product origin as indicator of food quality and safety and its role in the purchase decision**

The first part of the study was aimed at the identification of attributes perceived by consumers as indicators of food quality and safety. Specifically, the role of domestic country of product origin was analysed. Respondents could indicate up to three factors from the list shown or complete their own factor. The Table with the results is presented in Annex no. 1. Food quality and safety is mostly connected with natural ingredients of a product, followed by health benefits and freshness. These findings are in consistency with the studies of Jennings (2016), Livio (2017), Davis (2015) and Hartman (2016) mentioned in the literature review. According to their studies, Millennials pay greater attention to healthy food and the healthiness, naturalness and freshness of products are expected as basic attributes of food quality. When focusing on food product origin, only around a fifth of Slovaks and Poles and 12.7% of Czechs have food quality and safety associated with product originating from their domestic country. This is not in line with Kalicharan (2014) who mentioned the consumers are often using the country of origin as a measure of product quality. Quality label, that can be the signal of product origin, is perceived as quality indicator only by 15.8% of Czechs, 17.2% of Poles and 9.5% of Slovaks.

Significant difference between associations mentioned by Czechs, Slovaks and Poles was confirmed by Chi-square test, Sig. = 0.014. Looking at the differences between pairs of the countries (CR and SR, CR and PL, and SR and PL), the results are quite interesting. Statistically significant differences exist between the answers of Czechs and Poles (Sig. = 0.004) as well as between the answers of Slovaks and Poles (Sig. = 0.022), but there is no difference between the answers of Czechs and Slovaks (Sig. = 0.376).

In this context, respondents were also asked whether they check the product origin when buying food. As it is mentioned above, according to the findings of the Special Eurobarometer survey 2012, 71% of Europeans see the geographical origin of food as important but only one-third as very important (European Commission, 2012). In comparison with EU average, Czech, Slovak and Polish Millennials are less interested in this characteristic. The product origin is searched at least occasionally by 30.7% of Czechs, 37.3% of Slovaks and 43.7% of Poles, but only less than 7.2% of Czechs, 9.5% of Slovaks and 7.3% of Poles do it regularly. A lower interest of Millennials in product origin was revealed also in previously published studies (European Commission, 2012; Marzilli, 2017), their results are more positive than those for the Czechs, Slovaks and Poles.

Statistically significant differences between the attention given by Czech, Slovak and Polish Millennials to product origin were confirmed, Sig. = 0.000. Cramer's V is 0.296, i.e. there is moderate association between variables. To obtain a deeper insight into the differences between groups of respondents, the attention paid to product origin was analysed also between pairs of countries. Chi-square test confirmed significant differences between Czechs and Poles (Sig. = 0.000, Cramer's V = 0.412) and between Slovaks and Poles (Sig. = 0.000, Cramer's V = 0.466), Cramer's V values indicate relatively strong associations. A difference between the Czechs and Slovaks is not confirmed (Sig. = 0.210).

### 3.2 Preference of product origin and perception of domestic and foreign food quality

More than half of Czech (62.0%), Slovak (55.0%) and Polish (60.8%) Millennials favor food products originated from domestic producers and approximately one-third of respondents give priority to local and regional products. It indicates a strong preference of domestic production. Perception of domestic and foreign food quality is ambiguous, depending on the country of product origin. In comparison with Czechs and Slovaks, Poles believe more in the quality of domestic products. Only a minority of respondents prefer food products from foreign producers and consider them as having a higher quality (table no. 3).

**Table no. 3: Preference of food products origin  
and perception of food quality by respondents' country (%)**

<b>Preference of food products origin</b>	<b>CR</b>	<b>SR</b>	<b>PL</b>
from local or regional producers	27.5	37.8	37.2
from domestic producers	62.0	55.0	60.8
from foreign producers	10.5	7.2	2.0
<b>Perception of food quality</b>			
Domestic products have a higher quality than foreign.	18.4	29.1	38.2
Domestic products are as good as foreign.	25.9	34.4	13.7
Domestic food products have a lower quality than foreign.	8.5	2.6	1.0
It depends on the country of product origin.	47.3	33.8	47.1

There is a relationship between food products origin preference and respondents' country (Sig. = 0.030, Cramer's V = 0.109) and also between perception of domestic and foreign food quality and respondents' country (Sig. = 0.000, Cramer's V = 0.196).



Further, the relation between perception of domestic/foreign food quality and product origin preference was tested. In the CR (Sig. = 0.025, Cramer's V = 0.190) and in SR (Sig. = 0.026, Cramer's V = 0.218), the perception of domestic/foreign food quality depends on consumer preference of products origin. Czechs and Slovaks, who prefer food products from local, regional or domestic producers, believe more in a higher or the same quality of domestic products in comparison with the foreign ones, whereas respondents with preference of food products from foreign producers also consider them as having a higher quality than domestic ones. In PL, there is no relation between variables (Sig. = 0.357).

Following this topic, respondents named countries associated with high-quality and low-quality foods. Germany was most often considered by Czechs (51.6%) and Slovaks (37.3%) as the country with high-quality food, whereas Poles (52.3%) most often mentioned their own country. This is in line with the above presented results related to perception of quality of domestic and foreign food products, Poles believe in a higher quality of their domestic products the most. On the second position, Czechs (19.0%) and Slovaks (34.2%) rank their own country, Poles named Germany (30.6%). Countries with low-quality food, mentioned by Czechs and Slovaks, are Poland (named by 72.4% of Czechs and 70.3% of Slovaks) and China (named by 8.1% of Czechs and 8.9% of Slovaks). Poles most often connect China (33.4%) and Russia (13.8%) with low-quality foods.

### 3.3 Awareness of product origin labels included in the EU quality assurance scheme

With the renewed consumer interest in traditional foods, food producers all over Europe discuss whether an increased use of EU quality schemes (PDO, PGI and TSG) would be a useful tool in their overall marketing strategy, whereas authorities have an interest in the function of these schemes as an aid for consumer decision-making (Grunert and Aachmann, 2016). There is a crucial question whether consumers are aware of these schemes, whether they understand the meaning of them and whether they purchase certified products.

Therefore, respondents were shown the EU quality logos and they were asked which of the logos they are aware of (table no. 4). In the first step, they should indicate the logos recognized (aided awareness – total). Further, they were asked to explain their meaning (aided awareness – meaning). Finally, purchases of products certified with the respective logo were investigated (regular purchases). Although Millennials are less interested in the geographical origin of products (as it is mentioned above), their recognition (aided awareness – total) of the EU quality logos is higher, compared with the EU average and with the findings for the 15-39 age group according to the Special Eurobarometer survey 2015.

**Table no. 4: The labels awareness and purchases of certified products (%)**

	Aided awareness – total			Aided awareness – meaning			Regular purchases		
	PDO	PGI	TSG	PDO	PGI	TSG	PDO	PGI	TSG
CR	36.2	40.3	38.5	13.6	15.4	16.3	2.1	2.6	3.2
SR	22.8	27.2	19.0	8.2	11.4	7.6	2.9	4.3	3.6
PL	49.6	50.3	52.3	15.2	15.2	18.5	4.7	3.9	7.1
EU average <sup>a</sup>	20.0	17.0	15.0	-	-	-	-	-	-
EU 15-24 <sup>a</sup>	21.0	20.0	16.0	-	-	-	-	-	-
EU 25-39 <sup>a</sup>	22.0	18.0	17.0	-	-	-	-	-	-

Note: <sup>a</sup> the Special Eurobarometer survey 2015

As it can be seen from table no. 4, Polish Millennials are the most familiar with the EU quality scheme, the lowest awareness was found in SR. When comparing these three countries, this is consistent with the fact that SR has the lowest number and PL has the highest number of products registered as PDO, PGI or TSG (table no. 2).

Polish Millennials also show slightly higher regular purchases of certified products than Czechs and Slovaks, however regular purchases of PDO, PGI and TSG products are very low in each particular country (table no. 4, the third row). Only less than 5% respondents (with the exception of 7.1% buyers of TSG products in PL) are regularly purchasing the products certified with these labels. The difference between the total aided awareness of the label logo and regular purchases of certified products is more than 45% in PL, 34% in the CR and 20% in SR. The reasons for this gap could be not only unfamiliarity of the labels, but also consumer disinterest in the product certification, a low number of PDO, PGI and TSG products registered by given country, or a poor representation of certified products in retail outlets. The gap between knowledge of the logo meaning and regular purchases of certified products is lower, however more than 10% in the CR and PL and 4% in SR. The results indicate that understanding the logo meaning has a positive impact on purchases of products certified with the respective logo, although there is still a group of consumers who do not buy certified products despite their knowledge of the label.

Chi-square test was undertaken to find out whether the labels awareness depends on the respondents' country. The relationships exist between respondents' country and PDO awareness (Sig. = 0.000, Cramer's V = 0.203), PGI awareness (Sig. = 0.000, Cramer's V = 0.197) as well as TSG awareness (Sig. = 0.000, Cramer's V = 0.215). According to Cramer's V values, the strengths of association are weak to moderate.

Moreover, it was also analysed in each particular country whether the labels awareness depends on attention given to food product origin during purchases. There is a slightly higher awareness of the labels by respondents who pay attention to product origin, however Chi-square test has not confirmed a statistically significant relation between these variables.

### 3.4 Attitudes to product origin labels

Respondents were asked to evaluate the statements about food origin labels on the 7-point scale of agreement (1 - I absolutely disagree, 7 - I absolutely agree). A higher mean indicates a higher level of agreement with the statement. In comparison with Czech and Slovak respondents, Poles show a lower level of agreement with the statements (with the exception of the statement 3). The evaluation of the statements by Czechs and Slovaks is similar with means from 3.37 to 4.30, i.e. average or slightly below average rating. All respondents mostly agree that labels facilitate food choice. Generally, mean values indicate insufficient perception of labels benefits (Annex no. 2).

Further, the differences between the perceptions of Czechs, Slovaks and Poles were analysed. Based on the results of Shapiro-Wilk test of normality, we can conclude with 95% confidence that the data tested are not normally distributed (p-value < 0.05). Therefore, nonparametric Kruskal-Wallis test, as the alternative test to the independent sample ANOVA, was undertaken to compare whether Czech, Slovak and Polish population means are equal or not and to test the hypotheses defined in the methodology section of this paper.

Based on the results of Kruskal-Wallis test (table no. 5), hypothesis H0 ("There are no statistically significant differences between the attitudes to food origin labels based on the respondents' country.") is rejected for the statements 1, 2, 4 and 6, statistical differences were confirmed, Sig. < 0.05. Eta coefficients indicate small associations between variables.

**Table no. 5: Kruskal-Wallis test<sup>a</sup> - attitudes to food origin labels**

Statement	Chi-square	df	Asymp. Sig.	Eta coefficient
1. The labels facilitate food choice.	6.772	2	0.034	0.107
2. The labels make food products more expensive.	20.837	2	0.000	0.189
3. Certified products are a higher quality.	0.332	2	0.847	0.021
4. I believe to the labels.	9.662	2	0.008	0.137
5. When buying food, I usually prefer certified products.	0.971	2	0.615	0.044
6. I am willing to pay more for certified products.	12.832	2	0.002	0.160

Note: <sup>a</sup> Grouping variable: Country (CR, SR, PL)

To compare the pairs of countries, i.e. whether two population means (Czech and Slovak, Czech and Polish, and Czech and Slovak) are equal or not, Mann-Whitney U Tests were performed. The results of Mann-Whitney U tests support the above presented findings. Whereas attitudes of Czechs and Slovaks are similar and there are no differences between their answers (i.e. we retain the null hypothesis for all of the statements), the evaluation of Polish respondents differs from both, the Czechs and the Slovaks.

On the basis of Mann-Whitney U test, comparing the Czech and Polish population means, null hypothesis is rejected for the statement 2 (U = 12146.500, Sig. = 0.000, Eta = 0.221), the statement 4 (U = 13557.000, Sig. = 0.002, Eta = 0.165) and the statement 6 (U = 13175.000, Sig. = 0.000, Eta = 0.186). Weak (the statement 4 and 6) or moderate (the statement 2) associations were indicated by Eta coefficients.

Mann-Whitney U test was undertaken also to compare answers of Slovak and Polish Millennials. Null hypothesis is rejected for the statements 1 (U = 9970.500, Sig. = 0.011, Eta = 0.133), 2 (U = 9482.500, Sig. = 0.002, Eta = 0.170) and 6 (U = 9977.000, Sig. = 0.012, Eta = 0.150). Eta coefficients indicate weak associations between variables.

## Conclusions

The aim of the paper was to identify and compare how Generation Y consumers from three very close EU countries, the Czech Republic, Slovak Republic and Poland, perceive the food products origin and its labelling in the context of product quality and safety. Four research questions were advanced. The summary of findings is as follows.

RQ1: How many Czech, Slovak and Polish Millennials monitor the product origin when buying food? The product origin is searched at least occasionally by 30.7% of Czechs, 37.3% of Slovaks and 43.7% of Poles, but only less than 10% do it regularly. In comparison with findings of previously published studies (European Commission, 2012; Marzilli, 2017), Czech, Slovak and Polish Millennials are less interested in product origin.

RQ2: Are domestic products preferred and perceived as having a higher quality than the foreign ones? Yes, a strong preference of domestic, regional and local products was

indicated in each respective country (89.5% of Czechs, 92.8% of Slovaks, 98.0% of Poles). Perception of domestic and foreign food quality is ambiguous and according to respondents' opinion, different from country to country. Domestic products are perceived as having a higher quality than the foreign ones mainly by Poles.

RQ3: Are Czech, Slovak and Polish Millennials aware of product origin labels included in the EU quality assurance scheme? In comparison with the EU average according to the Special Eurobarometer survey 2015 (European Commission, 2016), the Czech, Slovak and Polish Millennials are better aware of the EU logos. However, when they had to explain the logos' meaning, their awareness was significantly lower.

RQ4: Do Czech, Slovak and Polish Millennials have different attitudes to product origin labels? Different attitudes to product origin labels were confirmed between Czechs and Poles as well as between Slovaks and Poles. Null hypothesis was rejected for the statements "The labels facilitate food choice.", "The labels make food products more expensive.", "I believe to the labels.", and "I am willing to pay more for certified products." Poles agree less with these statements. Attitudes of Czechs and Slovaks do not differ.

To summarize the findings, it can be seen that the link between food products origin and product quality and safety perception by Generation Y consumers in the Czech Republic, Slovak Republic and Poland is not too strong. Although Czech, Slovak and Polish Millennials prefer domestic, regional or local food products over the foreign ones, only small percentages of them check regularly a food origin when buying food and know the meaning of the EU quality labels. Therefore, it is not surprising that benefits of the labels are not sufficiently perceived and purchases of certified products are minimal.

Although the results are embarrassing, the labels have the potential to attract Czech, Slovak and Polish Millennials and to be an effective tool to support the product origin and specific quality characteristics of a product. This assumption is supported by the study of consumers' attitudes to the PDO, PGI and TSG labels in six European countries. The study confirms that consumers' use of these labels is triggered by the belief that the labels signal better product quality (Verbeke, et al., 2012).

In each respective country, food producers are recommended to include the product origin and the labels as a part of their marketing strategy and to highlight the local or domestic origin of their production. They should make a greater effort to let consumers know that their products are manufactured under the strictest control systems and certified with the labels strengthening the local, traditional and natural values and guaranteeing originality, quality, traceability, and a higher level of food safety. Attributes associated by Millennials with food quality and safety, i.e. natural ingredients, health benefits and freshness of a product should be highlighted in promotion campaigns to increase consumers' interest in certified products. It is obviously necessary to provide consumers relevant, complete and accurate information in an understandable form, taking into account suitable media with respect to Generation Y specifics. Online communication, mobile phones and social media (DataMentors, 2016) to interact with Generation Y consumers can be of relevance.

As a result, it can be beneficial to both, consumers and producers of certified products. If consumers will be more familiar with product origin labels and their benefits, they will give more attention to products certified with the labels. They will be also willing to pay a premium price for this unique product. Generation Y's willingness to pay more for products that represent quality was observed in some studies (Quintal, et al., 2016). In consideration

of the fact that Generation Y is the very sizeable consumer segment with significant purchasing power (Stokes, 2015), benefits for the producers are obvious.

The presented study offers new insights for researchers and managers into the debate of the importance of product origin and its labelling on Generation Y's preferences, suggesting that the food product origin should be handled with care and the labels should be part of the marketing strategy of food producers. It can be beneficial in the food sector that is facing intense global competition and where the food safety scandals have shaken trust in food quality and safety over past years.

The limitations of the research lie in following facts. The study was conducted in three EU countries only. Attention was given to the EU quality scheme, but there are also national or regional product origin labels in each country. Only Generation Y was included into the research and therefore intergenerational comparison could not be done. Some related issues were not included into the study due to limited scope of the questionnaire.

To overcome these limitations, more research in this area is recommended. It could be useful to conduct more extensive studies to compare consumers' attitudes in other EU countries. National and regional quality labels could be included into the study with the purpose to investigate the differences between the awareness of national and European quality labels and attitudes towards them. It would be interesting to move forward with this study including other consumer generations and analyse intergenerational differences. Also cluster analysis could be used with the purpose to create a consumer typology based on consumer attitudes to food product origin and its labelling.

Following the findings of this study, it is recommended to explore some specific topics. According to the results, Millennials strongly prefer domestic products, but most of them do not check the product origin when buying food and they do not purchase products certified with the EU quality logos. How do they recognize the products originated from their domestic country? Are they influenced by known brands, previous experience with the product, embedding country of origin or some typical country of origin word or symbol on product packaging? It could be an interesting area of future research. The importance of product origin also depends on the product category; this issue should be also developed.

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**Annex no. 1****Associations with the term "quality and safe food" by respondents' country (%)**

Associations	CR	SR	PL
food product made from natural ingredients	69.2	68.4	81.5
food product beneficial to health	52.9	48.7	46.4
fresh food product	43.0	47.5	49.0
nutritionally balanced food product	41.6	41.1	31.1
food product certified with quality label	15.8	9.5	17.2
food product produced in domestic country	12.7	19.0	21.2
food product under known brand / manufacturer	7.2	7.0	8.6

**Annex no. 2****Attitudes to food origin labels (agreement with the statements<sup>a</sup>)**

Statement	CR		SR		PL	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
1. The labels facilitate food choice.	4.19	1.617	4.30	1.725	3.86	1.579
2. The labels make food products more expensive.	3.63	1.626	3.46	1.703	2.86	1.763
3. Certified products are a higher quality.	3.79	1.523	3.72	1.560	3.77	1.467
4. I believe to the labels.	4.08	1.602	3.82	1.649	3.54	1.569
5. When buying food, I usually prefer certified products.	3.48	1.637	3.37	1.598	3.32	1.639
6. I am willing to pay more for certified products.	3.78	1.763	3.63	1.710	3.11	1.679

Note: <sup>a</sup> Scale of agreement: 1 - I absolutely disagree, 7 - I absolutely agree